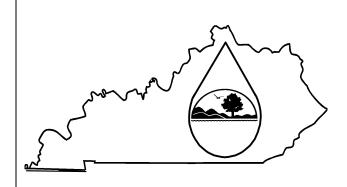
US ERA ARCHIVE DOCUMENT

# **KPDES FORM C**



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

## **PERMIT APPLICATION**

A complete application consists of this form and Form 1. For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Fraley Branch Surface Mine Permit No. 898-0848	County: Pike				
·	AGENCY				
I. OUTFALL LOCATION	USE				

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No.		LATITUDE			LONGITUDE	3	
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name)
FSC1-20	37	40	30	82	21	53	In-Series with FSC1-21
FSC1-21	37	40	32	82	21	56	In-Series with FSC1-22
FSC1-22	37	40	34	82	21	58	Spring Branch
FSC2-23	37	40	38	82	22	01	In-Series with FSC2-24
FSC2-24	37	40	42	82	22	04	In-Series with FSC2-25
FSC2-25	37	40	46	82	22	05	Spring Branch
TSC1-12	37	40	20	82	21	45	In-Series with TSC2-13
TSC1-13	37	40	23	82	21	50	In-Series with TSC2-14
TSC1-14	37	40	25	82	21	53	In-Series with TSC2-15
TSC1-15	37	40	27	82	21	55	Spring Branch
TSC2-16	37	40	21	82	21	42	In-Series with TSC2-17
TSC2-17	37	40	22	82	21	39	In-Series with TSC2-18
TSC2-18	37	40	24	82	21	45	Spring Branch
TSC3-19	37	40	28	82	21	47	In-Series with TSC4-27
TSC4-26	37	40	47	82	22	03	In-Series with FSC2-25
TSC3-27	37	40	37	82	21	56	In-Series with TSC4-22
WSC1-11	37	40	28	82	22	12	Fraley Branch

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WSC2-1	37	40	30	82	22	16	In-Series with WSC2-2	
WSC2-2	37	40	32	82	22	21	Fraley Branch	
WSC3-3	37	40	35	82	22	24	In-Series with WSC3-4	
WSC3-4	37	40	38	82	22	28	In-Series with WSC3-5	
WSC3-5	37	40	40	82	22	34	Big Creek	
WSC4-6	37	40	42	82	22	36	In-Series with WSC4-7	
WSC4-7	37	40	46	82	22	36	Big Creek	
WSC5-8	37	40	51	82	22	38	In-Series with WSC5-9	
WSC5-9	37	40	57	82	22	37	In-Series with WSC5-10	
WSC5-10	37	40	59	82	22	36	Big Creek	

#### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO.	OPERATION(S) CONTRIE	BUTING FLOW	TREATMENT			
(list)	Operation (list)	Avg/Design Flow 10 Year (include units)	Description	List Codes from Table C-1		
FSC-1	Surface runoff	37.25 cfs (peak)	Sedimentation	1-U		
150-1	Surface fulloff	37.23 CIS (pcak)	Discharge to surface water	4-A		
FSC-2	Surface runoff	42.73 cfs (peak)	Sedimentation	1-U		
1 SC-2	Surface fulloff	42.73 cis (peak)	Discharge to surface water	4-A		
TSC-1	Surface runoff	24.48 cfs (peak)	Sedimentation	1-U		
15C-1	Surface fulloff	24.46 CIS (peak)	Discharge to surface water	4-A		
TSC-2	Surface runoff	0.30 cfs (peak)	Sedimentation	1-U		
15C-2	Surface fulloff	0.30 cis (peak)	Discharge to surface water	4-A		
TSC-3	Surface runoff	54.05 cfs (peak)	Sedimentation	1-U		
150-5	Surface fulloff	54.05 cis (pcak)	Discharge to surface water	4-A		
TSC-4	Surface runoff	29.50 cfs (peak)	Sedimentation	1-U		
150-4	Surface fulloff	29.30 cis (pcak)	Discharge to surface water	4-A		
WSC-1	Surface runoff	15.05 cfs (peak)	Sedimentation	1-U		
WSC-1	Surface fulloff	13.03 cts (pcak)	Discharge to surface water	4-A		
WSC-2	Surface runoff	12.82 cfs (peak)	Sedimentation	1-U		
WSC-2	Surface fulloff	12.62 CIS (pcak)	Discharge to surface water	4-A		
WSC-3	Surface runoff	19.31 cfs (peak)	Sedimentation	1-U		
WSC-3	Surface fulloff	19.31 cis (peak)	Discharge to surface water	4-A		
WSC-4	Surface runoff	16.36 cfs (peak)	Sedimentation	1-U		
W5C-4	Surface funoff	10.30 cis (pcak)	Discharge to surface water	4-A		
WSC-5	Surface runoff	20.63 cfs (peak)	Sedimentation	1-U		
W3C-3	Surface fundif	20.03 cis (peak)	Discharge to surface water	4-A		

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	Yes (Complete the	e following to	,	III.)				
OUTFALL	OPERATIONS	FREQU	ENCY					
NUMBER	CONTRIBUTING FLOW	Days Per Week	Months Per Year	Flow (in n	Rate mgd)	Total ve (specify w		Duration (in days)
(list)	(list)	(specify average)	(specify average)	Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	
I. MAXIM	UM PRODUCTION							
. Does an e	ffluent guideline limi	ation promul	gated by El	PA under Section	on 304 of the C	Clean Water Act	apply to your f	acility?
	Yes (Complete Ite	em III-B) List	t effluent gu	ideline categor	ry:			
$\boxtimes$	No (Go to Section	IV)						
· Arotholis	mitations in the annlis	oblo offluont	quidalina a	very sead in tar	me of production	on (or other mee	uras of aparet	ion)?
	mitations in the applic			•	•	on (or other mea	sures of operati	ion)?
	Yes (Complete Ite	em III-C)		No (Go to S	ection IV)	·		,
□ C. If you an	11	em III-C) m III-B, list	the quantit	No (Go to S	ection IV) sents the actua	al measurement	of your maxii	num level of
C. If you an production	Yes (Complete Itesswered "Yes" to Item, expressed in the ter	em III-C) m III-B, list ms and units  MAXIMUM	the quantitused in the	No (Go to S ty which repre applicable efflo	ection IV) sents the actuation guideline,	al measurement and indicate the	of your maxinaffected outfal	num level of ls.
□ C. If you an	Yes (Complete Itesswered "Yes" to Item, expressed in the ter	em III-C) m III-B, list ms and units  MAXIMUM	the quantitused in the	No (Go to S  ty which repre applicable effle  ITY peration, Prod	ection IV) sents the actuation guideline,	al measurement and indicate the	of your maxii affected outfal	num level of ls.
C. If you an production	Yes (Complete Itesswered "Yes" to Item, expressed in the ter	em III-C) m III-B, list ms and units  MAXIMUM	the quantitused in the	No (Go to S  ty which repre applicable effle  ITY peration, Prod	ection IV) sents the actuation guideline, luct, Material,	al measurement and indicate the	of your maxinaffected outfal	num level of ls.
C. If you an production	Yes (Complete Itesswered "Yes" to Item, expressed in the ter	em III-C) m III-B, list ms and units  MAXIMUM	the quantitused in the	No (Go to S  ty which repre applicable effle  ITY peration, Prod	ection IV) sents the actuation guideline, luct, Material,	al measurement and indicate the	of your maxinaffected outfal	num level of ls.
C. If you an production  Quantity Per	Yes (Complete Iteswered "Yes" to Item, expressed in the term.  Day Units of	em III-C) m III-B, list ms and units  MAXIMUM	the quantitused in the	No (Go to S  ty which repre applicable effle  ITY peration, Prod	ection IV) sents the actuation guideline, luct, Material,	al measurement and indicate the	of your maxinaffected outfal	num level of ls.
C. If you an production  Quantity Per  V. IMPRO  A. Are you	Yes (Complete Ites swered "Yes" to Item, expressed in the term.  Day Units of VEMENTS  now required by an	em III-C)  m III-B, list ms and units  MAXIMUM Measure  y federal, sta	the quantitused in the  1 QUANTI On  ate or loca	No (Go to S  ty which repre applicable efflicable  (TY peration, Prod (sp	ection IV) sents the actuation uent guideline, luct, Material, ecify) meet any imp	Etc.  Elementation sch	of your maxinaffected outfall  Affected O (list outfall n	num level of ls.  Outfalls numbers)  construction,
C. If you an production  Quantity Per  V. IMPRO  A. Are you upgrading	Yes (Complete Ites swered "Yes" to Item, expressed in the termonal Day Units of VEMENTS	m III-C) m III-B, list ms and units  MAXIMUM Measure  y federal, statestewater equ	the quantitused in the  1 QUANTI O  ate or local	No (Go to S  ty which repre applicable efflicable  (SP)  (sp)  I authority to practices or a	ection IV) sents the actuation uent guideline, luct, Material, ecify)  meet any impany other envi	Etc.  Elementation schronmental programmental programmenta	of your maxinaffected outfall  Affected O (list outfall needule for the rams which means)	num level of ls.  Outfalls numbers)  construction, ay affect the
Quantity Per  V. IMPRO A. Are you upgrading discharges	Yes (Complete Ites swered "Yes" to Item, expressed in the ter Day Units of VEMENTS  now required by any or operation of was	m III-C) m III-B, list ms and units  MAXIMUM Measure  y federal, statestewater equipolication? Times	the quantitused in the  I QUANTI OI  ate or local alignment or his includes	No (Go to S  ty which repre applicable effle  TTY peration, Prod (specific practices or a s, but is not line	ection IV) sents the actuation uent guideline, luct, Material, ecify) meet any impany other envimited to, permited	Etc.  Elementation schronmental prograt conditions, ad	of your maxing affected outfall affected outfall in the control of	num level of ls.  Outfalls numbers)  construction, ay affect the
Quantity Per  V. IMPRO A. Are you upgrading discharges	Yes (Complete Ites wered "Yes" to Item, expressed in the term.  Day Units of VEMENTS  now required by any or operation of was described in this ap	m III-C) m III-B, list ms and units  MAXIMUM Measure  y federal, statestewater equiplication? The schedule let	the quantitused in the  A QUANTI Op  ate or local aripment or his includes sters, stipular	No (Go to S  ty which repre applicable efflet  ITY peration, Prod (specific specific	ection IV) sents the actuation uent guideline, luct, Material, ecify) meet any impany other envimited to, permited	elementation schronmental progrit conditions, ador loan condition	of your maxing affected outfall affected outfall in the control of	num level of ls.  Outfalls numbers)  construction, ay affect the
V. IMPRO A. Are you upgrading discharges orders, en	Yes (Complete Ites swered "Yes" to Item, expressed in the term.  Day Units of VEMENTS  now required by any of the system of the	m III-C) m III-B, list ms and units  MAXIMUM Measure  y federal, sta astewater equiplication? The e schedule let	the quantitused in the  A QUANTI Op  ate or local aripment or his includes sters, stipular	No (Go to S  ty which repre applicable efflor  ITY  peration, Prod  (specific specific specif	meet any impany other envi	elementation schronmental progrit conditions, ador loan condition	of your maxing affected outfall of the country of t	num level of ls.  Outfalls numbers)  construction, ay affect the
V. IMPRO A. Are you upgrading discharges orders, en	Yes (Complete Ites swered "Yes" to Item, expressed in the term of	m III-C) m III-B, list ms and units  MAXIMUM Measure  y federal, sta astewater equiplication? The e schedule let	the quantitused in the  A QUANTI Op  ate or location or location includes the stipular able)	No (Go to S  ty which repre applicable efflor  ITY  peration, Prod  (specific specific specif	meet any impany other envi	elementation schronmental prograt conditions, ador loan condition	of your maxing affected outfall of the country of t	construction, ay affect the
V. IMPRO A. Are you upgrading discharges orders, en	Yes (Complete Ites swered "Yes" to Item, expressed in the term of	m III-C) m III-B, list ms and units  MAXIMUM Measure  y federal, sta astewater equiplication? The e schedule let e following ta	the quantitused in the  A QUANTI Op  ate or location or location includes ters, stipulated the property of the	No (Go to S  ty which repre applicable efflor  ITY  peration, Prod  (specific specific specif	meet any impany other envi	elementation schronmental prograt conditions, ador loan condition	of your maxinaffected outfall not contain the contains affected outfall not contain the contains which make the contains t	construction, ay affect the enforcement

environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each

3

program is now under way or planned, and indicate your actual or planned schedules for construction.

#### V. INTAKE AND EFFLUENT CHARACTERISTICS

**POLLUTANT** 

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

**SOURCE** 

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

**POLLUTANT** 

NONE				
	NEG NOT GOVERNMENT			
VI. POTENTIAL DISCHARO	GES NOT COVERED BY ANA	LYSIS		
	n V-C a substance or a component s as an immediate or final product		h you use or pr	roduce, or expect to use or
Yes (List all su	ch pollutants below)	No (G	o to Item VI-B	)
	at your raw materials, processes, of during the next 5 years exceed two			
Yes (Complete	Item VI-C) No	(Go to Item VII)		
	m VI-B, explain below and descritants which you anticipate will be more space.			
VII. BIOLOGICAL TOXICI	TY TESTING DATA			
	r reason to believe that any biolog er in relation to your discharge wit		chronic toxicit	y has been made on any of your
Yes (Identify the	ne test(s) and describe their purpo	ses below)	No	(Go to Section VIII)

#### VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

No (Go to Section IX)

**SOURCE** 

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)

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### IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
SIGNATURE	DATE

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

Part A – You must	provide the results of	of at least one	analysis for every p		ble. Complete one tab	le for each outf	all. See instruction	ns for additional detai						
П				2. EFFLUENT				3. UNI (specify if			. INTAKE (optional)			
1. POLLUTANT	a. Maximum D	a. Maximum Daily Value b. Maximum 30-Day (if available)		30-Day Value			d. No. of	a. Concentration	b. Mass	a. Long-Term A	<u> </u>	b.		
-		(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	No of Analyses					
a. Biochemical Oxygen Demand (BOD)														
b. Chemical Oxygen Demand (COD)		Information Not Applicable to Mining Operations												
c. Total Organic Carbon (TOC)														
d. Total Suspended Solids (TSS)	10													
e. Ammonia (as N)				Informa	tion Not A	Applical	ble to Mi	ining Oper	ations					
f. Flow (in units of MGD)	VALUE	0.001	VALUE		VALUE				MGD	VALUE				
g. Temperature (winter)				Informa	ntion Not A	\nnlical	ble to Mi	ining Oper	ations					
h. Temperature (summer)						гррпси			autons					
	MINIMUM N	MAXIMUM 7.85	MINIMUM	MAXIMUM				STAN	DARD UNITS					

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Part B - In the MARK "X" column, place an "X" in the <u>Believed Present</u> column for each pollutant you know or have reason to believe is present. Place an "X" in the <u>Believed Absent</u> column for each pollutant you believe to be absent. If you mark the <u>Believed Present</u> column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT	2 MAR	K "X"				3. FLUENT				4. UNITS		6. INTAKE (optional)		
AND CAS NO.	a.	<b>b.</b>	a. Maximum Dai	ly Value	b. Maximum 3 Value (if avail	0-Day lable)	c. Long-Tern Value (if ava	n Avg. ilable)	d. No. of	a.	b.	a. Long-Term Value	Avg	b. No. of
(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1) Concentration	(2) Mass	Analyses
a. Bromide (24959-67-9)		X												
b. Chloride		X												
c. Chlorine, Total Residual		X												
d. Color		X												
e. Fecal  Coliform Or E.coli		X												
f. Fluoride (16984-48-8)		X												
g. Hardness (as CaCO <sub>3</sub> )	X		380	mg/l										
h. Nitrate – Nitrite (as N)		X												
i. Nitrogen, Total Organic (as N)		X												
j. Oil and Grease		X												
k. Phosphorous (as P), Total 7723-14-0		X												
1. Radioactivity							T		1	T	1	1		
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium Total		X												
(4) Radium, 226, Total		X												
(5) Strontium- 90, Total		X												
(6 Uranium		X												

	Part B - Continue	ed													
	1.	2					3.				4.			5.	
	POLLUTANT	MAR	K "X"				FLUENT				UNITS			E (option	
	And CAS NO.		b.	a. Maximum Dail	v Vol	b. Maximum 3		c. Long-Tern Value (if avai	n Avg.	d.		l.	a.	Vol	b. No. of
	(if available)	a. Believed	Believed	(1)	y value (2)	Value (if avail	(2)	(1)	(2)	No. of Analyses	a. Concentration	b. Mass	Long-Term Avg (1)	(2)	Analyses
┕	(II avallable)	Present	Absent	Concentration	Mass	Concentration	Mass	Concentration	Mass	Allalyses	Concentration	Mass	Concentration	Mass	Allalyses
_	m. Sulfate						2.2000		-1-0000						
Z W	(as SO <sub>4</sub> )	X		637	Mg/l										
_	(14808-79-8)				·										
•	n. Sulfide														
1	(as S)		X												
2	o. Sulfite														
	(as SO <sub>4</sub> )		X												
_	(14286-46-3)														
MOO															
$oldsymbol{eta}$	p. Surfactants		X												
$\frown$	q. Aluminum,														
ullet	Total	X		0.03	Mg/l										
$\frown$	(7429-90)			-	8										
_	r. Barium, Total		X												
	(7440-39-3)		71												
ш	s. Boron, Total (7440-42-8)		X												
	t. Cobalt, Total														
	(7440-48-4)		X												
I	u. Iron, Total	X		0.04	Mg/l										
-	(7439-89-6)			0.01	11191										
-	v. Magnesium Total		X												
ᇙ	(7439-96-4)		Λ												
	w. Molybdenum														
œ	Total		X												
	(7439-98-7)														
٩	x. Manganese, Total	X		0.07	Mg/l										
	(7439-96-6)	Λ		0.07	IVI g/I										
1	y. Tin, Total		X												
_	(7440-31-5)		Λ												
Δ	z. Titanium,		v												
-	Total (7440-32-6)		X												
ш	(/++0-32-0)							<u> </u>	l	1			<u>I</u>	l	
M															

**EPA ARCHIVE DOCUMENT** 

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the Testing Required column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Mark "X: in the Believed Absent column for each pollutant you believe to be absent. If you mark either the Testing Required or Believed Present columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1.	N	2. MARK "X"					3. LUENT				4. UNITS		INTAK	5. E (optiona	
POLLUTANT And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily	Value	b. Maximum 3 Value (if avail		c. Long-Term Value (if avail		d. No. of	a. Concentration	b. Mass	a. Long-Term Av	g Value	b. No. of Analyses
(if available)	Required	Present	Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	
METALS, CYAN	NIDE AND TO	OTAL PHE	NOLS												
1M. Antimony Total (7440-36-0)	X	X		0.001 (below detection limit)	Mg/l										
2M. Arsenic, Total (7440-38-2)	X	X		0.0007	Mg/l										
3M. Beryllium Total (7440-41-7)	X	X		0.0005(below detection limit)	Mg/l										
4M. Cadmium Total (7440-43-9)	X	X		0.0005(below detection limit)	Mg/l										
5M. Chromium Total (7440-43-9)	X	X		0.002(below detection limit)	Mg/l										
6M. Copper Total (7550-50-8)	X	X		0.001	Mg/l										
7M. Lead Total (7439-92-1)	X	X		0.0005(below detection limit)	Mg/l										
8M. Mercury Total (7439-97-6)	X	X		0.0002(below detection limit)	Mg/l										
9M. Nickel, Total (7440-02-0)	X	X		0.0016	Mg/l										
10M. Selenium, Total (7782-49-2)	X	X		0.001	Mg/l										
11M. Silver, Total (7440-28-0)	X	X		0.0005(below detection limit)	Mg/l										

Part C – Continu	ıed																
		2.			3. 4. 5. EFFLUENT UNITS INTAKE (optional) a.												
1.	I N	MARK "X"	1			EFF	LUENT			ı	UNITS			E (optional	1)		
POLLUTANT And CAS NO.			h			h Marimum 2	0 Dov	a Long Town	A 2100	a		h		. Volue	ь		
Alla CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily	Value	b. Maximum 3 Value (if avail		c. Long-Term Value (if avail		d. No. of	a. Concentration	b. Mass	Long-Term Av	g value	b. No. of		
(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses	Concentration	111433	(1)	(2)	Analyses		
	_			Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass			
METALS, CYAN	NIDE AND TO	OTAL PHE	NOLS (Con	tinued)													
12M. Thallium,																	
Total	X	X		0.0005(below											i		
(7440-28-0)				detection limit)	Mg/l												
13M. Zinc, Total	X	X		0.011											i l		
(7440-66-6)	A	Λ		0.011	Mg/l										i		
14M. Cyanide,					1V1g/1												
Total	X	X		0.02(below											i		
(57-12-5)				detection limit)	Mg/l										i		
15M. Phenols,																	
Total	X	X		0.05(below											i		
				detection limit)	Mg/l												
DIOXIN	ı		1	T													
2,3,7,8 Tetra-				DESCRIBE RESI	ULTS:												
chlorodibenzo, P, Dioxin			X														
(1784-01-6)			Λ														
GC/MS FRACTI	ION – VOLA	TILE COM	POLINDS														
GC/MBTRICT	lon vola	TILL COM	locitos														
1V. Acrolein															i l		
(107-02-8)			X												i		
2V.																	
Acrylonitrile															i l		
(107-13-1)			X														
3V. Benzene			37												i l		
(71-43-2)			X														
5V. Bromoform (75-25-2)			X												i l		
6V. Carbon			Λ														
Tetrachloride															i		
(56-23-5)			X												i l		
7V. Chloro-																	
benzene															ı l		
(108-90-7)			X														
8V.							]								ı l		
Chlorodibro-															ı l		
momethane (124-48-1)			X												ı l		
(124-48-1)	]		Λ		J					1					i l		

	1.	1	2 MARI
H	POLLUTANT And CAS NO. (if available)	a. Testing Required	Beli Pre
UMEN	9V. Chloroethane (74-00-3) 10V. 2-Chloro- ethylvinyl Ether (110-75-8) 11V. Chloroform		
ססכו	(67-66-3) 12V. Dichloro- bromomethane (75-71-8) 14V. 1,1- Dichloroethane (75-34-3)		
HIVE	15V. 1,2- Dichloroethane (107-06-2) 16V. 1,1- Dichlorethylene (75-35-4) 17V. 1,2-Di- chloropropane		
ARCI	(78-87-5) 18V. 1,3- Dichloropro- pylene (452-75-6) 19V. Ethyl- benzene (100-41-4)		
S EPA	20V. Methyl Bromide (74-83-9)		
'n			

Part C - Continu	ied														
2. 3. 4. 5. 1. MARK "X" EFFLUENT UNITS INTAKE (optional)															
1.	]	MARK "X"				EFF	LUENT				UNITS		INTAK	E (optiona	
POLLUTANT										_		_	a.		b.
And CAS NO.	a.	a.	b.	a.		b. Maximum 3		c. Long-Term		d.	a.	b.	Long-Term Av	g Value	No. of
(10 11 11 )	Testing	Believed	Believed	Maximum Daily		Value (if avail		Value (if avail		No. of	Concentration	Mass			Analyses
(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)	
OXI				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
9V. Chloroethane															
(74-00-3)			X												
10V. 2-Chloro-			Λ												
ethylvinyl Ether															
(110-75-8)			X												
11V.			23												
Chloroform															
(67-66-3)			X												
12V. Dichloro-															
bromomethane															
(75-71-8)			X												
14V. 1,1-															
Dichloroethane															
(75-34-3)			X												
15V. 1,2-															
Dichloroethane															
(107-06-2)			X												
16V. 1,1-															
Dichlorethylene			X												
(75-35-4) 17V. 1,2-Di-			A												
chloropropane (78-87-5)			X												
18V. 1,3-	1		11				<del>                                     </del>								
Dichloropro-															
pylene			X												
(452-75-6)															
19V. Ethyl-															
benzene															
(100-41-4)			X												
20V. Methyl															
Bromide															
(74-83-9)	1		X			1			l						

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Part C – Continu	ed														
		2.					3.			4.			5.		
1. POLLUTANT	I	MARK "X"	1			EFF	LUENT	T		1	UNITS			E (optiona	
And CAS NO.	a.	a.	b.	a.		b. Maximum 3	0-Dov	c. Long-Term	Ava	d.	a.	b.	a. Long-Term Avg	v Volue	b. No. of
Alla CAS NO.	Testing	Believed	Believed	Maximum Daily	Value	Value (if avail		Value (if avail		No. of	Concentration	Mass	Long-Term Av	z. value	Analyses
(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)	<b>3</b>
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
21V. Methyl															
Chloride															
(74-87-3)			X												
22V. Methylene Chloride															
(75-00-2)			X												
23V. 1,1,2,2-			Λ												
Tetrachloro-															
ethane			X												
(79-34-5)			1.												
24V.															
Tetrachloro-															
ethylene			X												
(127-18-4)															
25V. Toluene															
(108-88-3)			X												
26V. 1,2-Trans- Dichloro-															
ethylene			X												
(156-60-5)			Λ												
27V. 1,1,1-Tri-															
chloroethane															
(71-55-6)			X												
28V. 1,1,2-Tri-															
chloroethane															
(79-00-5)			X												
29V. Trichloro-															
ethylene															
(79-01-6)			X												
30V. Vinyl															
Chloride			37												
(75-01-4)			X												

Part C – Continu	ed														
Tarte continu	cu	2.					3.				4.			5.	
1.	ľ	MARK "X"				EFF	LUENT				UNITS		INTAK	E (optiona	1)
POLLUTANT													a.		b.
And CAS NO.	a.	a.	b.	a.		b. Maximum 3		c. Long-Term		d.	a.	b.	Long-Term Av	g Value	No. of
	Testing	Believed	Believed	Maximum Daily		Value (if avail		Value (if avail		No. of	Concentration	Mass			Analyses
(if available)	Required	Present	Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	
GC/MS FRACTI	ON – ACID	COMPOUN	DS		•	•			•	•		•			•
1A. 2-Chloro-															
phenol															
(95-57-8)			X												
2A. 2,4-															
Dichlor-			37												
Orophenol (120-83-2)			X												
3A.															
2,4-Dimeth-															
ylphenol			X												
(105-67-9)															
4A. 4,6-Dinitro- o-cresol															
(534-52-1)			X												
5A. 2,4-Dinitro-			Α												
phenol															
(51-28-5)			X												
6A. 2-Nitro-															
phenol															
(88-75-5)			X												
7A. 4-Nitro-															
phenol															
(100-02-7) 8A. P-chloro-m-			X												
cresol															
(59-50-7)			X												
9A.			21												
Pentachloro-															
phenol			X												
(87-88-5)															
10A. Phenol							]								
(108-05-2) 11A. 2,4,6-Tri-			X												
chlorophenol															
(88-06-2)			X												
GC/MS FRACTI	ON - BASE/	NEUTRAL.		DS		<u> </u>	l	l				l	<u> </u>		L
1B. Acena-	OII DIDE	LUIMIL		20											
phthene															
(83-32-9)			X		<u></u>		<u></u>								
							_					_			

Part C – Continu	ed														
rare C - Continu	cu	2.					3.				4.			5.	
1.	ľ	MARK "X"				EFF	LUENT				UNITS		INTAK	E (optiona	D
POLLUTANT							<u> </u>				01,112		a.	д (ориона	b.
And CAS NO.	a.	a.	b.	a.		b. Maximum 3	0-Dav	c. Long-Term	Avg.	d.	a.	b.	Long-Term Av	g Value	No. of
	Testing	Believed	Believed	Maximum Daily	Value	Value (if avail		Value (if avail		No. of	Concentration	Mass			Analyses
(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)	
• •	•			Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTI	ON – BASE/	NEUTRAL	COMPOUN												I
2B. Acena-															
phtylene															
(208-96-8)			X												
3B. Anthra-															
cene															
(120-12-7)			X												
4B.															
Benzidine															
(92-87-5)			X												
5B. Benzo(a)-															
anthracene															
(56-55-3)			X												
6B. Benzo(a)-															
pyrene															
(50-32-8)			X												
7B. 3,4-Benzo-															
fluoranthene															
(205-99-2)			X												
8B. Benzo(ghl)															
perylene															
(191-24-2)			X												
9B. Benzo(k)-															
fluoranthene			v												
(207-08-9) 10B. Bis(2-			X												
10B. Bis(2-chlor-															
oethoxy)-			X												
methane			Λ												
(111-91-1)															
11B. Bis															
(2-chlor-															
oisopropyl)-			X												
Ether			_												
12B. Bis															
(2-ethyl-															
hexyl)-			X												
phthalate															
(117-81-7)															

Part C – Continued	d														
- ure Continued	~	2.					3.				4.			5.	
1.	N	AARK "X"				EFF	LUENT				UNITS		INTAK	E (optiona	<b>l</b> )
POLLUTANT													a.	_	b.
And CAS NO.	a.	a.	b.	a.		b. Maximum 3	0-Day	c. Long-Term	Avg.	d.	a.	b.	Long-Term Av	g Value	No. of
	Testing	Believed	Believed	Maximum Daily		Value (if avail	able)	Value (if avail	able)	No. of	Concentration	Mass			Analyses
(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTIO	)N – BASE/N	NEUTRAL	COMPOUN	DS (Continued)		T									
13B. 4-Bromo-															
phenyl															
Phenyl ether			X												
(101-55-3)															
14B. Butyl-															
benzyl phthalate			X												
(85-68-7)			Λ												
15B. 2-Chloro-															
naphthalene															
(7005-72-3)			X												
16B. 4-Chloro-															
phenyl															
phenyl ether			X												
(7005-72-3)															
1															
17B. Chrysene															
(218-01-9)			X												
18B. Dibenzo-															
(a,h)															
Anthracene			X												
(53-70-3) 19B. 1,2-															
Dichloro-															
benzene			X												
(95-50-1)			Λ												
20B. 1,3-															
Dichloro-															
Benzene			X												
(541-73-1)															
21B. 1,4-															
Dichloro-															
benzene			X												
(106-46-7)															
22B. 3,3-															
Dichloro-															
benzidene			X												
(91-94-1)															
23B. Diethyl															
Phthalate (84-66-2)			X												
(84-00-2)			Λ				<u> </u>								

-	Part C - Continu	ed														
			2.					3.				4.			5.	
	1.	I I	MARK "X"				EFF	LUENT			1	UNITS	ı		E (optiona	
	POLLUTANT And CAS NO.						1. 34	0 D	T T.		,			a.	X7.1	b.
	And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily	Volue	b. Maximum 3 Value (if avail		c. Long-Term Value (if avail		d. No. of	a. Concentration	b. Mass	Long-Term Ava	g. value	No. of Analyses
	(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses	Concentration	IVIASS	(1)	(2)	Allalyses
-	(11 11 (1111111111111111111111111111111	required	Tresent	riosciii	Concentration	Mass	Concentration	Mass	Concentration	Mass	111111y Ses			Concentration	Mass	
$\mathbf{z}$	GC/MS FRACTI	ON – BASE/	NEUTRAL	COMPOUN												
-	24B. Dimethyl				,											
Ξ	Phthalate															
	(131-11-3)			X												
$\mathbf{x}$	25B. Di-N-															
	butyl Phthalate															
ſ	(84-74-2)			X												
	26B. 2,4-Dinitro-															
Э	toluene			X												
$\sim$	(121-14-2)			41												
0	27B.															
)	2,6-Dinitro-															
Q	toluene			X												
	(606-20-2)															
	28B. Di-n-octyl															
ш	Phthalate															
7	(117-84-0)			X												
	29B. 1,2-															
	diphenyl- hydrazine (as			X												
Ι	azonbenzene)			Λ												
-	(122-66-7)															
	30B.															
Э	Fluoranthene															
)	(208-44-0)			X												
R																
	31B. Fluorene															
V	(86-73-7)			X												
1	32B.															
	Hexachloro- benzene			X												
d	(118-71-1)			Λ												
	33B.															
Δ	Hexachloro-															
	butadiene			X												
ш	(87-68-3)															
	34B.															
70	Hexachloro-															
(U)	cyclopenta-			X												
	diene															
	(77-47-4)															

Part C – Continu	ad														
rari C - Collullu	eu	2.					3.				4.			5.	
1.	,	MARK "X"				EFE	3. LUENT				UNITS		INIT A IZ	S. E (optional	1)
POLLUTANT	ľ	VIAKK A	I			<u>EFF</u>	LUENI	<u> </u>			UNIIS	ı		ь (ориона	
And CAS NO.	_	_	1.	_		b. Maximum 3	0 D	. Т Т	A		_		a.	- <b>3</b> 7-1	b. No. of
Alla CAS NO.	a. T	a.	b.	a. Mai Daile	. X7-1			c. Long-Term	Avg.	d.	a.	b.	Long-Term Av	g varue	
(if available)	Testing	Believed	Believed	Maximum Daily		Value (if avail		Value (if avail		No. of	Concentration	Mass	(4)	(2)	Analyses
(II available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)	
C C A C ED A CET	ON DACE	A TOTAL PORT OF THE PART OF TH	COMPONI	Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTI	ON – BASE/I	NEUTRAL	COMPOUN	DS (Continued)		1	1			1		1			
35B. Hexachlo-															
roethane			37												
(67-72-1)			X												
36B. Indneo-															
(1,2,3-oc)-			v												
Pyrene (193-39-5)			X												
(193-39-3) 37B.															
Isophorone															
(78-59-1)			X												
38B.			Λ												
Napthalene															
(91-20-3)			X												
39B.			Α												
Nitro-															
benzene			X												
(98-95-3)			11												
40B. N-Nitroso-															
dimethyl-															
amine			X												
(62-75-9)															
41B.															
N-nitrosodi-n-															
propylamine			X												
(621-64-7)															
42B. N-nitro-															
sodiphenyl-															
amine			X												
(86-30-6)															
43B. Phenan-															
threne															
(85-01-8)			X												
44B. Pyrene															
(129-00-0)			X												
45B. 1,2,4 Tri-															
chloro-			37												
benzene			X												
(120-82-1)															

Part C – Continued																
	2.			3.										5.		
1. POLLUTANT	I	MARK "X"	1	EFFLUENT							UNITS INTAKE (option					
And CAS NO.	a.	a. a. Cesting Believed		а.		b. Maximum 30-Day		c. Long-Term Avg.		d.	a.	b.	a. Long-Term Avg. Value		b. No. of Analyses	
Testi	Testing			Maximum Daily Value		Value (if available)		Value (if available)		No. of	Concentration	Mass	Long Term Av			
		Present		(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)		
G G A KG ED A GE	ON PEGEN	CIDEC		Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION - PESTICIDES																
1P. Aldrin																
(309-00-2)			X													
an nya																
2P. α-BHC (319-84-6)			X													
(31) 01 0)																
3Р. β-ВНС																
(58-89-9)			X						-							
4P.																
gamma-BHC			X													
(58-89-9)																
5P. δ-BHC																
(319-86-8)			X													
6P. Chlordane			37													
(57-74-9)			X													
7P. 4,4'-DDT																
(50-29-3)			X													
8P. 4,4'-DDE																
(72-55-9)			X													
9P. 4,4'-DDD (72-54-8)			X													
			11													
10P. Dieldrin																
(60-57-1) 11P. α-			X						-							
IIP. α- Endosulfan																
(115-29-7)			X						<u> </u>							
12Р. β-									_							
Endosulfan (115-29-7)			X													
13P. Endosulfan			Λ													
Sulfate																
(1031-07-8)			X													
14P. Endrin (72-20-8)			X													
(14-40-0)	l	l	Λ		l	l	l		1	l		l				

Part C – Continued															
	2. MADIZ ((X))			3.							4.		5.		
1. POLLUTANT	MARK "X"			EFFLUENT							UNITS		INTAKE (optional a.		b.
And CAS NO.	a.			a. Maximum Daily Value		b. Maximum 30-Day		c. Long-Term Avg.		d.	a.	b.	Long-Term Avg Value		No. of
(if available) Requ	Testing Required			(1)	(2)	Value (if avail	(2)	Value (if avail (1)	(2)	No. of Analyses	Concentration	Mass	(1)	(2)	Analyses
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTI 15P. Endrin	ION – PESTI	CIDES	X		I	1		I	1				<u> </u>		
Aldehyde			Λ												
(7421-93-4)			**												
16P Heptachlor			X												
(76-44-8)															
17P. Heptaclor			X												
Epoxide (1024-57-3)															
18P. PCB-1242			X												
(53469-21-9)															
·			X												
19P. PCB-1254 (11097-69-1)															
1			X												
20P. PCB-1221 (11104-28-2)															
			X												
21P. PCB-1232 (11141-16-5)															
(11141-10-3)			X												<del>                                     </del>
22P. PCB-1248															
(12672-29-6)			X												
23P. PCB-1260															
(11096-82-5)			X												<del>                                     </del>
24P. PCB-1016			71												
(12674-11-2)			X												
25P. Toxaphene			Λ												
(8001-35-2)															
1															
]															